

Remarks

Reconsideration of the application and allowance of all pending claims are respectfully requested in light of the remarks below. Claims 1-52 remain pending.

In the Office Action dated April 23, 2002, claims 1, 5, 8, 10-13, 15, 18, 22, 25, 27-30, 32, 40, 43, 45-48, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budde et al. (U.S. Patent No. 4,503,535) in view of Fischer et al. (U.S. Patent No. 5,001,472); claims 2, 3, 7, 19, 20, 24, 35-38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budde et al. in view of Fischer et al. and further in view of Brown et al. (U.S. Patent No. 4,860,284); and claims 4, 6, 9, 14, 16, 17, 21, 23, 26, 31, 34, 35, 39, 41, 44, 49, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budde et al. in view of Fischer et al., Brown et al., and further in view of Moiin et al. (U.S. Patent No. 6,192,483). Applicants respectfully, but most strenuously, traverse these rejections for the reasons below.

In one aspect, applicants' invention is directed to reconfiguring a network to reflect a change in the topology of the network by utilizing a predetermined length quiescent state. In one example, this predetermined period of time is sufficient to allow the transmission of reconfiguration requests from one node to other nodes of the network, thereby causing the other nodes to also enter quiescent states.

As one particular example, applicants claim, in independent claim 1, a method of reconfiguring a network having a plurality of nodes to reflect a change in topology of the network. The method includes, for instance, upon receiving a reconfiguration request at one node of the plurality of nodes, entering a quiescent state at the node, wherein the one node remains in the quiescent state for a predetermined period of time sufficient to allow at least one other node of the plurality of nodes to also enter a quiescent state; and upon termination of the quiescent state at the one node, reconfiguring the one node to reflect the change in topology of the network without checking with the at least one other node.

Thus, in applicants' claimed invention, a quiescent state is used in the reconfiguring of a network. This quiescent state is entered by a node, upon receiving a reconfiguration request at the node. The node stays in the quiescent state for a period of time sufficient to allow at least one other node to also enter a quiescent state. Upon termination of the quiescent state of the node, the node is reconfigured to reflect a change in topology of the network without checking with the at least one other node. This is very different from the teachings of Budde and Fischer, either alone or combination.

For instance, Budde fails to teach or suggest applicants' claimed feature of entering a quiescent state at a node, upon receiving a reconfiguration request at the node, wherein the node remains in the quiescent state for a

predetermined period of time sufficient to allow at least one other node to enter the quiescent state. In Budde, an error recovery sequence begins when all of the nodes in the system receive an error report. Thus, the error reporting is synchronized by hardware across the nodes. After the nodes receive the error reports, then the system is quiesced to allow any transient noise to subside. There is no teaching or suggestion in Budde of entering a quiescent state, upon receiving a reconfiguration request, and staying in that quiescent state for a sufficient period of time to allow at least one other node to enter the quiescent state, as claimed by applicants. There is no reason, in Budde, to have a node remain in a quiescent state for a period of time to allow the other nodes to enter the quiescent state, since the nodes already have received the error report. Thus, Budde fails to teach or suggest this aspect of applicants' invention.

As a further example, Budde fails to teach or suggest applicants' claimed element of upon termination of the quiescent state, reconfiguring the node to reflect the change in topology of the network without checking the at least one other node. It is explicitly admitted in the Office Action that Budde fails to teach or suggest such an element.

Based on the foregoing, applicants respectfully submit that Budde fails to teach or suggest one or more aspects of applicants' claimed invention.

Fischer fails to overcome the deficiencies of Budde. Fischer is directed to a token distribution technique that does not require an even distribution of tokens. The system reconfiguration of Fischer is the determination by a RIM of the network address of the next sequential active node in a rotational sequence. This system reconfiguration occurs when the RIM fails to sense activity on a medium for a predetermined time. Thus, when inactivity is sensed, reconfiguration is performed. This is very different from applicants' claimed invention.

For example, in applicants' claimed invention, reconfiguration takes place after termination of the quiescent state. In contrast, in Fischer, reconfiguration takes place when there is inactivity, not after it ends.

Moreover, as used in Fischer, inactivity is a very different concept from a quiescent state of an aspect of applicants' claimed invention. For example, an inactive node in Fischer is one that is not functioning, while a node that is in a quiescent state, as claimed by applicants, is one that is, for instance, waiting for activity in the system to terminate.

Although there is discussion of inactivity in Fischer, there is no discussion, teaching or suggestion in Fischer of utilizing a quiescent state in reconfiguring a network. That is, Fischer is silent as to a quiescent state in reconfiguring. For instance, Fischer fails to teach or suggest applicants' claimed element of upon receiving a

reconfiguration request at one node of a plurality of nodes, entering a quiescent state at the one node. That is, there is no description in Fischer of entering a quiescent state, upon receiving a reconfiguration request. Instead, in Fischer, reconfiguration is performed when the RIM has not received a token for a predetermined time period. That is, when inactivity is detected in Fischer, action is taken, as opposed to the node going into a quiescent state.

Further, there is no discussion, teaching or suggestion in Fischer of a node remaining in the quiescent state for a predetermined period of time sufficient to allow at least one other node of the plurality of nodes to also enter a quiescent state. This is simply missing from Fischer.

Yet further, there is no discussion, teaching or suggestion in Fischer of reconfiguring a node to reflect the change in topology, upon termination of the quiescent state. Again, there is no quiescent state, as claimed by applicants. Moreover, in Fischer, reconfiguring is performed upon inactivity, not upon termination of a quiescent state.

Applicants respectfully submit that a careful reading of Fischer, and in particular, Column 11, lines 1-29, as recited in the Office Action, fails to teach or suggest one or more features of applicants' claimed invention. Again, there is no teaching or suggestion of using a quiescent state in reconfiguring, as claimed by applicants. Even the Office Action admits that Budde-Fischer fail to disclose

reconfiguring a node upon termination of a quiescent state (see page 5 of the Office Action, lines 3-4).

Since both Fischer and Budde fail to teach or suggest one or more aspects of applicants' claimed invention, applicants respectfully submit that the combination of Budde and Fischer also fails to teach or suggest applicants' claimed invention. Thus, applicants respectfully request an indication of allowability for claim 1 and independent claim 18.

The other independent claims are patentable for the same reasons as above. Moreover, Brown does not overcome the deficiencies of the base references. For example, Brown fails to describe, teach or suggest use of a quiescent state in reconfiguring. A careful reading of Brown indicates that reconfiguring takes place after identifying where a token signal was lost. The loss of the token signal is identified after expiration of a timer. In contrast to applicants' claimed invention, there is no discussion of a quiescent state or of using the quiescent state in reconfiguring. Thus, applicants respectfully submit that the independent claims are patentable over the combination of Budde, Fischer and Brown.

The dependent claims are patentable for the same reasons as the independent claims, as well as for their own additional features. The other references do not overcome the deficiencies of the base references. Based on the

foregoing, applicants respectfully request an indication of allowability for all pending claims.

Should the Examiner wish to discuss this case with applicants' attorney, please contact applicants' attorney at the below listed number.

Respectfully submitted,

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